

Maryland Campus Reaches Out to Community

For many years, the University of Maryland, Baltimore (UMB) campus has been a leader in developing and implementing cost-effective, energy-efficient projects in the City of Baltimore. UMB is now working with Rebuild America to build on its success in saving energy in campus buildings by creating a steering committee to recruit, train and support new partners from all sectors of the community. The roll-out of this expanded partnership is planned this spring.

Located in the hub of downtown Baltimore, the UMB campus is known for its schools of medicine, nursing, pharmacy, dentistry, social work and law. The 48 buildings on campus date from 1807 to 1998 and encompass about 4 million square feet. UMB facility professionals have pursued a course of employing energy-saving measures in campus buildings for the past 15 years and their efforts are paying off. Despite the construction of new facilities and the use of more energy-intensive, high-tech research equipment, UMB has managed to hold its energy costs steady at approximately \$10 million annually for the past few years.

A Shared Mission

UMB's success is largely due to a shared belief among campus administrators, facility management staff, operations and maintenance personnel and design engineers that energy efficiency adds value to UMB's mission to advance knowledge in health care, law, social welfare and related disciplines through research, teaching and service. Collectively, they agreed to:

- Use life-cycle costing and take a long-term view on energy initiatives
- Coordinate energy-efficiency activities through the

collaborative efforts of an energy master planning team

- Use a single "open" building management system for real-time monitoring and control that connects all major building systems
- Focus on finding capital — generated both internally and externally

Major Upgrades Completed

In 1984, the campus installed its first direct digital control project, an upgrade of controls on a rooftop air handling and cooling unit in a converted warehouse. This marked the launch of UMB's energy conservation program. In 1985, the campus took an 80-year-old building with a 160-ton demand load and satisfied it with a 100-ton chiller and thermal ice storage to manage loads.

In 1992, UMB retrofitted lighting in a 300,000 square-foot medical research facility, cutting energy usage by 40 percent. One year later, the University retrofitted the School of Pharmacy and realized a three-year payback on energy savings. Since then, UMB started to use a master lighting control system, as well as motion and heat sensors. All told, over 30 percent of the campus lighting has been retrofitted.

UMB's mechanical and electrical systems also have been substantially upgraded.

Setting an Example

As an urban campus in the midst of a downtown undergoing continuous redevelopment, UMB is uniquely positioned to draw key community players in Baltimore into the Rebuild America fold.

*For more information on the UMB partnership, contact **Robert Rowan**, Assistant Vice President, Office of Facilities Management, University of Maryland, Baltimore, at (410) 706-5000 or by e-mail at rrowan@fm.umaryland.edu.*